



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I 5 POST OFFICE SQUARE - SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

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Certified Mail - Return Receipt Requested

Wallace Bell, Compliance Manager Clean Harbors Environmental Services 37 Rumery Road South Portland, ME 04106

Re: Notice of Violation No. 2013-NOV-06

The purpose of this Notice of Violation ("NOV") is to inform you that personnel of the Environmental Protection Agency ("EPA") have made observations during the multi-day (September 18, 2012 through September 21, 2012) inspection and otherwise obtained information indicating that violations of the Clean Water Act ("CWA") have occurred at the Clean Harbors centralized wastewater treatment facility ("Facility") located at 37 Rumery Road in South Portland, Maine.

The Facility is subject to centralized waste treatment regulations under 40 Code of Federal Regulations ("CFR") § 437, Subpart D and is authorized under City of South Portland Industrial User Wastewater ("IUWD") Permit No.003 ("the Permit") to discharge to a publicly owned treatment works ("POTW") operated by the City of South Portland. The City of South Portland's local pretreatment program, approved by EPA in 1983, issued the Permit.

The following violations were observed:

- 1) Samples to be analyzed for Oil and Grease ("O&G") are not being collected correctly according to requirements in the Permit:
 - Clean Harbors' contract laboratory, Katahdin Analytical Services ("Katahdin"), uses an automatic composite sampler equipped with plastic tubing to collect samples to be analyzed for O&G, before placing the samples into amber glass containers.
 - O The Permit requires all handling and preservation of collected samples to be performed in accordance with 40 CFR § 136 and amendments. According to 40 CFR §136.3, samples to be analyzed for O&G must be collected into a glass container.
 - Clean Harbors does not follow the sampling techniques specified in 40 CFR §136.3, because samples to be analyzed for O&G are not collected directly

into a glass containers.

2) Samples to be analyzed for volatile organics are not being collected correctly according to requirements of the Permit:

O Katahdin uses an automatic composite sampler equipped with plastic tubing to collect grab samples to be analyzed for volatile organics, **before** placing the

samples into 40-mL clear glass containers with a Teflon septum.

O The Permit requires all handling and preservation of collected samples to be performed in accordance with 40 CFR § 136 and amendments. According to 40 CFR § 136, Appendix A, Method 624, samples to by analyzed for volatile organics must be collected into a glass container.

Clean Harbors does not follow the sampling technique specified in 40 CFR §136, Appendix A, because grab samples to be analyzed for volatile organics

are not collected directly into glass containers.

3) Samples to be analyzed for semi-volatile organics are not being collected correctly according to requirements of the Permit:

o Katahdin uses an automatic composite sampler equipped with plastic tubing and a plastic jug to collect composite samples to be analyzed for semi-volatile organics, **before** placing the samples into 1-liter amber glass containers.

- O The Permit requires all handling and preservation of collected samples to be performed in accordance with 40 CFR § 136 and amendments. According to 40 CFR § 136, Appendix A, Method 625, samples to be analyzed for semi-volatile organics must be collected into glass containers.
- Clean Harbors does not follow the sampling techniques specified in 40 CFR Part 136, because composite samples to be analyzed for semi-volatile organics are not collected **directly** into glass containers.
- 4) pH value measurement and reporting are not being conducted correctly according to requirements of the Permit:
 - On September 21, 2012, Mr. D. Dadmun, the Lab and Wastewater Treatment Supervisor at the Facility, stated that most of Clean Harbors' pretreated wastewater effluent discharges are between pH 10.4 and 11. Mr. Dadmun also explained that the pH probe used to collect daily pH compliance measurements of this effluent is calibrated with pH 7 and pH 10 buffer solutions. According to Mr. Dadmun, Clean Harbors uses a temperature-compensating probe but does not report sample temperature along with pH measurements.
 - On September 20, 2012, Mr. N. Adams, an employee of Katahdin Analytical Services, explained how he measures the monthly pH compliance value at sewer manhole #2. Mr. Adams stated that he calibrates Katahdin's pH meter with pH 4 and pH 7 buffer solutions. He then checks the calibration by using the pH probe to measure a pH 10 buffer solution.
 - The Permit requires all handling and preservation of collected samples to be performed in accordance with 40 CFR § 136 and amendments. 40 CFR Part 136 references EPA Method 150.2 for pH measurement. EPA Method 150.2 (Section 7.7.1) states that pH electrodes should be calibrated prior to

measurement with a minimum of two points (buffer solutions) whose values bracket the expected pH of the wastewater. Additionally, Method 150.2 (Section 4.4) explains how both temperature interferences and the temperature of the sample at the time of analysis should be reported along with pH measurements.

- o The daily and monthly pH compliance measurements are being collected with pH meters that are not being properly calibrated according to EPA Method 150.2. Additionally, the temperature of the wastewater is not being reported along with the pH measurements.
- 5) Compliance samples for sampling point 002 are not being collected at the location specified in the Permit:
 - On September 20, 2012, Mr. Adams showed EPA inspectors that he collects compliance samples for sample point 002 (referred to by Facility personnel as sampling point B) at a point after the oil/water separator that is located in the wastewater treatment process building. On September 21, 2012, Mr. Dadmun confirmed this fact by locating on a wastewater treatment flow diagram the sample point 002.
 - o Part 2.A. of the Permit states that sample point 002 is to be located at the end of the plate clarifier.
 - Clean Harbors is not collecting the compliance sample for sample point 002 at the end of the plate clarifier as specified in the Permit.
- 6) Discrepancies in the reporting of sample results, according to requirements of the Permit, were identified through a comparison of laboratory data sheets and Discharge Monitoring Reports ("DMRs") for the period between September 2009 and August 2012:
 - Clean Harbors submitted monthly DMRs and copies of laboratory data sheets from September 2009 through August 2012 to EPA inspectors.
 - The Permit requires monitoring reports to indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were preformed.
 - Several monthly average results were incorrectly reported on the July 2012 DMR, according to laboratory data sheets.
 - Results for ammonia and fluoride were not reported on the February 2012 DMR.
 - Several monthly average results were incorrectly reported on the October 2011 DMR, according to the laboratory data sheet.
 - Incorrect results for arsenic, cadmium, chromium, cobalt, copper, lead, mercury, nickel, silver, tin, titanium, vanadium, and zinc were reported on the August 2011 DMR, according to laboratory data sheets. In addition, the DMR cover letter for August 2011 includes incorrect reporting dates.
 - An incorrect result for fluoride was reported on the June 2011 DMR, according to laboratory data sheets.
 - o An incorrect result for mercury was reported on the April 2011

- DMR, according to laboratory data sheets. In addition, the April 2011 DMR did not report a result for O&G.
- Incorrect results for mercury and vanadium were reported on the December 2010 DMR, according to laboratory data sheets.
- A result for pH was not reported on the October 2010 DMR.
- Monthly average results for all sample parameters were not reported on the February 2010 DMR.
- An incorrect result for nickel was reported on the December 2009
 DMR, according to laboratory data sheets.
- 7) Composite samples collected at the Facility are not representative of the volume and nature of the discharge to be monitored, pretreated wastewater effluent, as required according to the Permit:
 - On September 20, 2012, Mr. Adams stated that he collects the composite compliance monitoring sample by deploying an automatic composite sampler at the bottom of sewer manhole #2. Mr. Adams then explained that he programs the sampler to collect a time-proportional composite sample consisting of forty-eight 200-mL aliquots every 30 minutes for 24 hours.
 - o The Permit requires samples and measurements collected to be representative of the volume and nature of the discharge that is to be monitored.
 - Clean Harbors discharges its pretreated wastewater effluent in batches. Prior to discharge through sewer manhole #2, wastewater effluent is stored in any of the three 20,000-gallon holding tanks located at the Facility. Clean Harbors discharges one holding tank at a time and usually no more than one or two holding tanks per day; each tank takes approximately 6.5 hours to discharge. Clean Harbors' DMRs document that discharge flows varied from no-flow to the discharge of multiple holding tanks in a single day.
 - o Sanitary wastewater and greywater from the Facility's laboratory, showers and bathrooms are discharged continuously through sewer manhole #2.
 - O Because Katahdin collects a 24-hour composite sample within sewer manhole #2, but pretreated wastewater effluent is only discharged during certain periods that are less than 24 hours in duration, the sample is not representative of the volume and nature of discharge that is required to be monitored according to the Permit. The sample is also not representative because the sampler collects sanitary wastewater together with the pretreated wastewater effluent.
- 8) Calculations and reporting of mass-based parameters are not representative of the volume and nature of the monitored discharge as required according to the Permit:
 - O Clean Harbors' DMRs document that daily discharge volumes of pretreated wastewater effluent vary from no-flow to multiple holding tanks. Even on days when multiple tanks are discharged, Clean Harbors only uses the volume of one holding tank to represent the daily flow when calculating the concentration of certain mass-based parameters in DMRs.
 - The August 2012 DMR shows the total discharge for August 15, 2012, was 29,560 gallons, consisting of discharges from two holding tanks. However, the flow used in DMR calculations, including the calculation of mass-based

- parameters (arsenic, molybdenum, and biological oxygen demand), was reported as 16,960 gallons (representative of the discharge from only one holding tank).
- Clean Harbors is monitoring and reporting mass-based parameters using a method that is unrepresentative of the monitored discharge as is required by the Permit.
- Clean Harbors could not produce an initial certification statement and therefore the periodic certification statements submitted to EPA were unable to be fully verified.
 - EPA requested and received copies of Clean Harbors' periodic certification statements from 2008 through 2012. As required under 40 CFR § 437.41(b), the periodic certification statement certifies that the facility is operating its treatment systems to provide equivalent treatment as set forth in the initial certification. Without the initial certification statement, information in the periodic certification statement cannot be verified or fully evaluated. All but one of the periodic certification statements provided by Clean Harbors contained the following statement: "No changes have been made to the wastewater treatment system (WWTS). CHESI [Clean Harbors Environmental Services Inc.], South Portland, WWTS continues to meet the equivalent treatments for the Central Waste Treatment Mixed Waste Categorical treatment standards."
 - William Connors, Clean Harbors' Senior Vice-President for environmental compliance, stated during the closing meeting on September 21, 2012, that the Baseline Report and 90-day Compliance Report represented Clean Harbors' initial certification statement.

The violations of the Permit are violations of requirements imposed in a pretreatment program approved under Section 402 of the CWA, 33 U.S.C. § 1342.

Within thirty (30) days of the date of receipt of this NOV, please submit to the contact person listed below a Compliance Statement describing the corrective actions that have been implemented and, for all violations not yet corrected, a description of the actions planned to be taken to correct the violation(s) and a schedule for their implementation.

This NOV may not specify all violations of the CWA or violations of other environmental requirements that may exist at the Facility. It is your responsibility to comply with all legal requirements, whether or not the EPA notifies you of any violations or takes enforcement action against you. Nothing in this NOV relieves you of other obligations under applicable federal, state, and local law. No provision of this NOV and no action or inaction by EPA shall be construed to constitute an assurance by the EPA that actions you take to address the violation(s) specified herein will result in compliance.

Please submit all information and refer any questions regarding this NOV to:

U.S. Environmental Protection Agency, Region 1 5 Post Office Square – Suite 100 Water Technical Unit Mail Code OES04-4 Boston, MA 02109-3912 Attn: Alex Rosenberg

If you have questions, please contact Alex Rosenberg at (617) 918-1709.

Sincerely yours,

Susan Studlien, Director

Office of Environmental Stewardship Environmental Protection Agency, Region 1

cc Nicholas Keen, Clean Harbor s Pamela Parker, MEDEP

Fred Gallant, MEDEP